RAILROAD COMMISSION OF TEXAS

OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 03-0267314

COMMISSION CALLED HEARING ON THE COMPLAINT OF TEXCOM GULF DISPOSAL, LLC REGARDING THE OPERATIONS OF DENBURY ONSHORE, LLC ON THE CONROE FIELD UNIT, CONROE FIELD, MONTGOMERY COUNTY, TEXAS

HEARD BY: Marshall F. Enquist - Legal Examiner
Richard D. Atkins, P.E. - Technical Examiner

APPEARANCES:	**REPRESENTING:**
COMPLAINANT:	
William Osborn	TexCom Gulf Disposal, LLC
Rick Johnston	
Louis Ross	
McCartney Taylor	
RESPONDENT:	
Brian Sullivan	Denbury Onshore, LLC
Greg Friend	
Randy Doss	
Mark Swadener	
Robert Sutherland	
Jon Herber	

PROCEDURAL HISTORY

Complaint Filed:	September 2, 2010
Notice of Hearing:	November 17, 2010
Hearing Held:	January 21, 2011
Transcript Received:	February 11, 2011
Proposal for Decision Issued:	September 1, 2011

EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

This is a Commission called hearing on the complaint of TexCom Gulf Disposal, LLC ("TexCom") regarding the operations of Denbury Onshore, LLC ("Denbury") on the Conroe Field Unit ("CFU"), Conroe Field, Montgomery County, Texas. TexCom requests revocation of the Commission's 1977 approval, in Oil & Gas Dockets 3-68,046 and 3-68,047, of the unitization of the Conroe Field Unit. TexCom asserts that Denbury is not actively utilizing the authority granted by the unitization approval and that Denbury's operation of the unit at a high water cut is not effective and efficient. TexCom further asserts that Denbury's current operations in the Conroe Field Unit "...may actually exacerbate waste, rather than prevent it." TexCom is requesting that the Railroad Commission acknowledge that the 1977 Commission Orders for unitization have terminated because the activities authorized (pressure maintenance by re-injection of natural gas) have ceased. As Complainant, TexCom carries the burden of proof.

TexCom recently acquired an undivided two net mineral acres in the CFU. This interest equates to a fractional interest of approximately 0.000013 and the interest gave TexCom standing to appear at the complaint hearing. Notice of the hearing was mailed to all 2,472 mineral and royalty owners and there were approximately 350 returned notices. Notice of the hearing was then published in the *Conroe Courier*, a newspaper of general circulation in Montgomery County, for four consecutive weeks beginning on November 22, 2010. Respondent Denbury does not dispute the sufficiency of notice.

Denbury believes that TexCom's complaint should be dismissed, as TexCom did not establish by a preponderance of the evidence that waste is occurring or is likely to occur. For the reasons set forth herein, the examiners recommend that this complaint be dismissed, because no waste has been shown, and no violations of statutes or Railroad Commission rules or orders have been proven.

DISCUSSION OF THE EVIDENCE

History

The Conroe Field was discovered in 1931 and has since produced 734 MMBO and 1.1 TCFG. In 1978, the Conroe Field Unit, comprising 18,829 acres, was formed for purposes of pressure maintenance by the injection of gas into the gas cap. Formation of the Unit involved five years of negotiations to include 218 tracts and 26 operators. Exxon Corporation ("Exxon") was the operator of the CFU at the time of unitization. The orders approving the CFU were signed by the Railroad Commission on November 28, 1977, in Oil and Gas Docket Nos. 3-68,046 (*Special Order Approving the Conroe Field Unit, Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas* and *Special Order Approving a Pressure Maintenance Operation for the Conroe Field Unit, Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas*) and 3-68,047 (*Special Order Rescinding the Field Rules as Adopted in Special Order No. 3-4299 Issued Effective December 22, 1942, as Amended and Adopting Rules for the Conroe and Conroe*

(Cockfield, Upper) Fields, Montgomery County, Texas). The effective date of Commission approval of the Conroe Field Unit, as stated in the Special Order, was January 1, 1978.

Oil & Gas Docket Nos. 3-68,046 and 3-68,047 were heard as consolidated dockets. Exxon's argument was that development of the field for both oil and gas had reached a point at which gas cap shrinkage had allowed movement of oil into the evacuated gas sands, resulting in the loss of a significant quantity of oil. Exxon believed that the oil should be recovered first, followed later by a gas blowdown. To achieve this end, Exxon proposed unitization for secondary recovery with a pressure maintenance program. The examiner agreed that secondary recovery and pressure maintenance were necessary and stated in Finding of Fact No. 1 that "Waste is occurring in the Conroe and Conroe (Cockfield, Upper) Field in the amount of approximately 3.5 million barrels per year." The examiner also found in Finding of Fact No. 4 that "The producing reservoir in the Conroe and Conroe (Cockfield, Upper) although designated as separate fields are in communication and constitute a common source of supply as a result of the reservoirs being in juxtaposition."

The unitized interval is from 4,680 feet to 5,420 feet, as shown on the log of the D. A. Madeley No. 45. This interval is directly beneath the Jackson Shale and includes six separate Upper Cockfield and Main Conroe sands. The Upper Cockfield and Main Conroe sands are separated by about 130 feet of shale. Current production from the CFU is about 2,400 BOPD and 200,000 BWPD, for an oil cut of approximately 1%. The saltwater production is reinjected, with a small part going into the unitized interval and the bulk of the water going into sands above the unitized interval where they have no effect on the unitized interval. Under current operations, Denbury estimates that remaining recoverable reserves from the CFU are 18 MMBO.

The Conroe Field has very complex faulting as a result of deep seated salt movement, which is common in southeast Texas. Since 1936, it has been documented that the extensive faulting in the Conroe Field allows migration of fluids throughout the Cockfield sands. Denbury's interpretation of 3-D seismic data obtained in 2009 confirms the presence of faults and fractures at various depths in the Cockfield sands. The existence of these numerous faults and fractures within the Cockfield further confirm Denbury's opinion that there is no confining shale within the Cockfield.

Over the years, gas from the deeper main Conroe sands leaked up into the Upper Cockfield sands, despite the presence of the 130 foot shale between the zones. Numerous published studies also confirm that the original contacts in the entire Cockfield series have moved up uniformly over time, demonstrating that the entire Cockfield is in communication. Water production from the CFU is believed to be the result of the natural water drive from the Lower Cockfield.

On May 14, 1996, the Commission signed a Final Order in Oil & Gas Docket No. 03-0211854 which accomplished several things. First, The Conroe and Conroe (Cockfield, Upper) Fields were consolidated into the Conroe Field. Second, Special Field Rules were adopted for the Conroe Field. Third, all oil wells and gas wells on all leases and units in the Conroe Field were assigned capacity allowables. Assignment of capacity allowables granted Exxon approval to blowdown the gas cap in the Conroe Field Unit. At the hearing, Exxon presented evidence that by starting the blowdown in 1998 the total hydrocarbon recovery would be 25.5 MMBOE. This

recovery was 2.5 MMBOE greater than it would have been if the blowdown was delayed until 2002. The evidence indicated that the blowdown needed to proceed as quickly as possible in order to minimize the negative effects on recovery by the encroaching strong water drive. Exxon began blowdown in 1998 and the gas cap was essentially depleted by 2003.

The Conroe Field Unit was operated by Exxon from 1978 through September, 2006, when the unit was sold to Wapiti. Wapiti operated the unit until December, 2009, when the unit was sold to Denbury Onshore.

TexCom's Complaint

TexCom is requesting that the Railroad Commission find that the 1977 Commission Orders authorizing the Conroe Field Unit have terminated because the activities authorized (pressure maintenance by re-injection of natural gas) have ceased. TexCom also believes that the continued blowdown of the gas cap is causing waste and recommends that all gas cap production cease and any produced gas be re-injected back into the Conroe Field.

TexCom's engineering expert witness noted that most of the produced water was being disposed of into shallower formations between 3,200 feet and 4,000 feet, which are above the unitized interval. He found only five wells that were injecting produced water back into the Conroe Field interval for pressure maintenance. Texcom found that Well Nos. 4040D and 1111 had injected 8.5 MMBW into the unitized interval, which it believes caused compression of the gas cap, which in turn caused the oil column to rise, "smearing" oil in the gas sands. The expert performed a decline curve analysis on the existing production and estimated the remaining reserves in the CFU to be approximately 5 MMBO. He was concerned that his remaining reserve estimate was substantially less than Denbury's estimate of 18 MMBO.

TexCom's engineering expert submitted two SPE papers that were written about the Conroe Field. These were "*A Study of the Conroe Field*" (1975) by Whitson and Burns and "*The Conroe Field Unit - A Challenge in Reservoir Control*" (1979) by Dalton, et al. TexCom's engineering expert estimated that currently Denbury was producing about 1 BCF of free gas per year from the CFU. He felt that this free gas production was creating a reservoir void that was allowing oil to move into the gas cap and be lost as a residual oil saturation. Using a current reservoir pressure of 1,975 psi and information from the SPE papers, the expert calculated that on the CFU approximately 364 MBO was being lost into the gas cap per year as residual oil saturation.

Texcom calculates that the pressure gradient for the shale in the unitized interval is 0.75 psi/ft, which means that Denbury's proposed CO_2 flood will be immiscible. Texcom asserts that successful CO_2 floods are those that are miscible, which means Denbury's proposed CO_2 flood will fail.

Denbury's Response

Denbury purchased the Conroe Field Unit from Wapiti Operating, LLC ("Wapiti") in 2009 for over $400 million, with the intention of conducting tertiary recovery program through CO_2

flooding in the field. Denbury anticipates spending a further $750 million to develop the field as a tertiary flood. Denbury has been conducting CO_2 floods in similar fields for the past 10 years and has its own CO_2 source in Mississippi. A pipeline has already been built to transport the CO_2 to various operations in Louisiana, Alabama, Mississippi and southeast Texas. In its projects, Denbury currently injects almost 2 BCFPD of CO_2, including purchased and recycled CO_2.

Injection of CO_2 into suitable reservoirs results in decreased viscosity of the residual oil, allowing it to move to producing wells. In Texas, Denbury currently operates two CO_2 Floods. In its Oyster Bayou field, Denbury is currently injecting over 40 MMCFPD of CO_2. Denbury initiated CO_2 injection in its Hastings Field at the end of 2010. Initiation of injection into the Conroe Field would be its third project in Texas, and will require building an 80 mile pipeline spur. Overall, Denbury currently operates 15 CO_2 floods of which 4 are immiscible and 11 are miscible. Since 1999, Denbury's production as a result of CO_2 injection has increased from 1,300 BOPD to almost 30,000 BOPD.

In the Conroe Field, Denbury expects to operate an immiscible CO_2 flood and recover approximately 17% of the original oil-in-place for the field, as a direct result of CO_2 flooding. This equates to at least 125 MMBO. Denbury's 20 year development plan for the CFU includes the drilling of 314 new wells, 79 workovers of active wells, and reactivation of 104 wells. It is anticipated that in the final development stage, there will be 271 producing wells and 225 injection wells.

Denbury's geologic expert witness submitted a structure map that was developed by the Conroe Technical Committee chaired by Dr. John Lee in 1977 for the Exxon unitization hearing. The map was a consensus structure map developed by over 20 companies. The Conroe Field is a triaxial graben with peripheral and radial faults that's symptomatic of a deep-seated salt dome. As the sand and shales were deposited, the salt moved due to the loading, causing a very complex pattern of faulting. It is not disputed that in the Conroe Field the original gas-oil contact was at 4,830 feet subsea and the original oil-water contact was at 4,990 feet subsea. In addition, these contacts were common to all of the sands in the Conroe Field.

The geologic expert performed a log analysis on the TexCom - WDW Lease, Well No. 410. This well was drilled as a disposal well in the lower Conroe sands and shows increasing resistivity above the original oil-water contact, demonstrating that residual oil exists in the Upper Cockfield in the area of the disposal well. Denbury further believes that, based on the log analysis, some of the uppermost sands in the immediate area of Well No. 410 have remaining primary oil to be recovered. The expert opined that the zones shown on the log represented isolated pools of oil that have been left behind trans-stratigraphically.

Denbury's engineering expert witness submitted reservoir depletion history diagrams that showed the state of the reservoir from initial conditions through gas cap blowdown and up to the year 2014 when the CO_2 flood will be initiated. The expert stated that it is important to remove as much methane gas as possible (through blowdown of the gas cap), since it hinders the efficiency of the CO_2 flood. He also performed an analysis of Exxon's findings to justify the gas cap blowdown. In 1996, Exxon believed that any remaining oil to be recovered was located in isolated pockets and

would be unaffected by the gas cap blowdown. Exxon projected remaining reserves of 25.5 MMBOE. In the present hearing, Denbury's engineering expert calculated the actual recovery of hydrocarbons to date since the blowdown to be 29.7 MMBOE or 4.2 MMBOE greater than Exxon's estimate. The expert opined that this was further proof that the gas cap blowdown did not negatively impact any remaining oil reserves.

The engineering expert stated that Denbury is still continuing with pressure maintenance operations on the CFU with the re-injection of the produced saltwater. He submitted a Conroe Field pressure history graph showing pressures from approximately 1965 through 2010. The graph showed a substantial pressure decline from 1965 through the beginning of pressure maintenance in 1978, which resulted in the arrest of the pressure decline and even a slight pressure increase over a five year period. The blowdown starting in 1997 resulted in a dip in the pressure of the Main Conroe sands, but this dip reversed itself in approximately 2003 and pressure began building rather sharply. Currently, pressures are higher than at the beginning of gas injection in 1978. The engineering expert also presented a bottomhole pressure history graph of the Conroe Field Unit Well No. 1618, which showed the pressure in that well continuously rising from approximately 380 psig in 1994 to 730 psig in 2009. Both graphs showed that the reservoir bottomhole pressure has been increasing substantially, as a result of produced saltwater re-injection and the influx of saltwater from a strong water drive. The expert opined that the reservoir was trying to return to the original bottomhole pressure and Denbury was maximizing the recovery of hydrocarbons from the CFU.

Denbury does not understand exactly what TexCom hopes to accomplish by asking the Commission to declare its 1977 orders void. If TexCom is seeking to terminate the Conroe Field Unit, the result would be an ultimate loss of oil.

Denbury's engineering expert detailed the consequences of terminating the CFU and reverting to lease based operations. He submitted an area map showing the nonproductive leases that would expire if the unit was terminated. The leases that would expire represented an area greater than 50 percent of the CFU area. The owners that contributed the lands in the expectation to share in all future production would have their royalty payments cease and flank properties, such as the State GLO lands, would be unfairly eliminated. In addition, when taking into account the 125 million barrels of oil that will be recovered by a CO_2 flood, the State of Texas would lose an estimated $414 million of severance taxes and $260 million of ad valorem taxes.

In the event of unit dissolution, the productive leases would require their own production testing and saltwater disposal facilities and a lot of leases would not be able to bear the cost of this facility de-consolidation. Many of the gas lift wells would have to be converted to electric submersible pumps (ESPs). Since saltwater disposal wells and facility's ownership would return to lease ownership, some leases would not have the right to dispose of produced water. The reduced water production on other leases could make some salt water disposal facilities uneconomic and require the cost of abandonment. CO_2 flooding on a lease basis would require the lease boundaries to be considered in flooding patterns in addition to the natural geologic boundaries. In order to protect the correlative rights, water fences would be required and the smaller leases might be uneconomic to flood.

Denbury referred to Article 4 of the Unit Agreement that states "To the end that the quantity

of Unitized Substances ultimately recoverable may be increased and waste prevented, Working Interest Owners shall, subject to provisions of this Article 4, with diligence and in accordance with and to the extent warranted by good engineering and production practices, engage in re-pressuring or pressure maintenance (whether with gas, inert gas or any other outside substances), water flooding, cycling or any other improved recovery operations." (Emphasis added) Article 1 of the Unit Agreement defines Outside Substances in Article 1.13 to include carbon dioxide.

Denbury believes that the language above does allow for CO_2 flooding operations on the CFU. Denbury also noted, that as per Article 18 of the Unit Agreement, the CFU can only be terminated for the lack of paying quantity production for more than 90 days or by the vote of 75% or more of the working interest owners. Neither has occurred.

Texcom alleged that Denbury's CO_2 flood would be immiscible and that successful CO_2 floods are miscible. Denbury notes that four of its twelve existing CO_2 floods are immiscible, and that these are as good as, or better than, their miscible floods. TexCom asked a Denbury expert witness to read a quote from "Practical Aspects of CO_2 Flooding Monograph", Volume 22, an SPE publication. The quote was "The adage goes, if it is a good water flood, it could be a good CO_2 flood, but if it is a bad water flood, it will be a terrible CO_2 flood." Asked if he had ever heard anything like this, the Denbury witness responded "Yeah. That's a - - that's a rule of thumb that's in the Permian Basin and we don't have any floods in the Permian Basin." Transcript, page 181, lines 11-13.

EXAMINERS' OPINION

The orders entered by the Railroad Commission in Oil and Gas Docket Nos. 3-68,046 and 3-68047, which gave the Conroe Field Unit an effective date of January 1, 1978, were valid orders of the Railroad Commission, and were properly entered based on the evidence presented at the hearing. The examiners do not find sufficient basis to conclude that Exxon's representations and projections were incorrect, or unreasonable.

Oil & Gas Docket No. 3-68,046 (*Special Order Approving the Conroe Field Unit, Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas* and *Special Order Approving a Pressure Maintenance Operation for the Conroe Field Unit, Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas*), signed by the Commission on November 28, 1977 was essential to the efficient recovery of hydrocarbons in the Conroe Field Unit. The first order gave Commission approval of the Conroe Field Unit. The second order provided authority for secondary recovery and pressure maintenance by gas re-injection, which prevented the further loss of hydrocarbons in the Conroe and Conroe (Cockfield, Upper) Fields. Denbury Exhibit 18 (see Attachment I) shows a steep pressure decline in the Main Conroe sands beginning in approximately 1968. The pressure maintenance authority allowed gas injection in 1978, which halted the decline and even slightly reversed it through 1995. Many of the provisions of these orders, but no recognition of the Conroe Field Unit, were effectively replaced by the 1996 blowdown order and assignment of capacity allowables (Oil & Gas Docket No. 03-0211854 - *Final Order Combining the Conroe and Conroe (Cockfield, Upper) Fields Adopting a Designation of Conroe Field for the Field Formed by Such Combination of Fields Amending and Adopting Operating Rules and regulations for the Conroe Field, Montgomery County, Texas.*), which, among other things, provided

for cessation of gas re-injection into unit wells. Blowdown authority applied in 1997 resulted in another pressure drop seen most prominently from 2000 to 2005. However, continued pressure maintenance by saltwater injection has resulted in increasing pressures which are currently greater than the pressures existing in the field prior to the beginning of gas injection in 1978. Secondary recovery and pressure maintenance are still an integral part of operations on the Conroe Field Unit. Rescinding the 1977 order in Oil & Gas Docket No. 3-68,046 could, at best, be useless and could cause waste, as it has been only partially replaced by the blowdown order and assignment of capacity allowables in Oil & Gas Docket No. 03-0211854.

Oil & Gas Docket No. 3-68,047 (*Special Order Rescinding the Field Rules as Adopted in Special Order No. 3-4299 Issued Effective December 22, 1942, as Amended and Adopting Rules for the Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas*), signed by the Commission on November 28, 1977 was, and continues to be, essential to the efficient recovery of hydrocarbons on the Conroe Field Unit. Among other things, the order established a Gas Oil Ratio (GOR) of 1,000 to 1 for the field with a provision that allowed production over the GOR based on the amount of gas re-injected for pressure maintenance. The new rules also allowed for the transfer of allowables from one well to another and created a bonus allowable of 2/10 of a barrel of oil for each reservoir barrel of gas injected over and above that required for net gas-oil ratio injection, limited to a maximum bonus equal to 10% of the basic allowable. This created an incentive for gas re-injection for purposes of pressure maintenance. Many of the provisions of this order were effectively replaced by the 1996 blowdown order and assignment of capacity allowables (Oil & Gas Docket No. 03-0211854 - *Final Order Combining the Conroe and Conroe (Cockfield, Upper) Fields Adopting a Designation of Conroe Field for the Field Formed by Such Combination of Fields Amending and Adopting Operating Rules and regulations for the Conroe Field, Montgomery County, Texas.*), which, among other things, provided for cessation of gas re-injection into unit wells.

The record in this hearing does not support a conclusion that waste is occurring, or likely to occur, in the Conroe Field, as a result of the continued existence of the CFU or as a result of the operations of Denbury. The argument that TexCom made regarding waste was that the continuing production of gas from the gas cap was allowing 364,000 BO per year to move into the gas cap. This conclusion was based on information contained in the 1975 and 1979 SPE papers and not on conditions in the field today. Denbury clearly showed that the blowdown of the gas cap, as recommended by Exxon in 1996, has resulted in the production of 29.7 MMBOE, an amount 4.2 MMBOE greater than Exxon's calculated estimate of 25.5 MMBOE. Without the blowdown, these reserves would otherwise have been lost as residual oil saturation in the gas cap and would have been unrecoverable. Recent operations on the Conroe Field Unit have resulted in the effective and efficient recovery of hydrocarbons, the very opposite of the waste alleged by TexCom.

Denbury is still continuing with pressure maintenance operations on the CFU with the re-injection of part of the produced saltwater into the unitized interval. From 1994 to 2009 the reservoir bottomhole pressure has been increasing substantially, as a result of produced saltwater re-injection and the influx of saltwater from a strong water drive. The bottomhole pressure in CFU Well No. 1618 has risen from 400 psi in 1994 to over 700 psi in 2009. The examiners conclude that Denbury is maximizing the recovery of hydrocarbons from the CFU.

Additionally, Denbury has plans to operate an immiscible CO_2 flood and recover

approximately 17% of the original oil-in-place for the field, as a direct result of CO_2 flooding. This equates to the recovery of at least 125 MMBO.

Terminating the CFU would cause waste by greatly reducing the efficiency of Denbury's planned CO_2 flood operation. Without the CFU, Denbury would be forced to conduct operations in a piecemeal, lease by lease basis. Reverting to lease based operations would allow leases to expire that cover an area greater than 50 percent of the CFU area. The owners that contributed the lands in the expectation to share in all future production would have their royalty payments cease and flank properties, such as the State GLO lands, would be unfairly eliminated. In addition, if Denbury abandoned the entire project, taking into account the 125 million barrels of oil that will be recovered by a CO_2 flood, the State of Texas would lose an estimated $414 million of severance taxes and $260 million of ad valorem taxes.

If the CFU were terminated, the productive leases would require their own production testing and saltwater disposal facilities and many leases would not be able to bear the cost of this facility de-consolidation. Many of the gas lift wells would have to be converted to ESPs. Since saltwater disposal wells and facility's ownership would return to lease ownership, some leases would not have the right to dispose of produced water. The reduced water production on other leases could make some salt water disposal facilities uneconomic and require the cost of abandonment. CO_2 flooding on a lease basis would require the lease boundaries to be considered in flooding patterns in addition to that natural geologic boundaries. In order to protect the correlative rights, water fences (a line of water injection wells acting as a barrier to a CO_2 flood) would be required and the smaller leases might be uneconomic to flood. The end result would be the ultimate loss of otherwise recoverable hydrocarbons, or waste.

Chapter 101 of the Tex. Nat. Res. Code allows the Railroad Commission to review the formation of a unit, and to approve unit agreements if they meet the specific requirements set forth in TNRC §101.013. Railroad Commission review of unit agreements must be based upon data and evidence in existence and presented to the Commission at the time of the application and hearing in a unitization approval docket. For the Railroad Commission to second-guess a unit approval based on subsequent changes in economic conditions, or reevaluation of geological or reservoir characteristics, would subject all unit agreements to uncertainty and potential revocation, contrary to the intent of TNRC Chapter 101.

Commission approval of unit agreements is an extremely important step in the institution of secondary recovery projects requiring unitization in the interests of conservation. To subject unitization agreements to possible revocation of Commission approval, absent a showing of waste or violation of statutes, rules or orders, could negatively impact the viability of projects which are needed for the conservation of oil and gas.

The examiners recommend that the Commission adopt the following findings of fact and conclusions of law, and enter the enclosed order dismissing the complaint filed by TexCom.

FINDINGS OF FACT

1. Notice of this hearing was given on November 17, 2010 to all parties entitled to notice. Notice of the hearing was published in the *Conroe Courier*, a newspaper of general circulation in Montgomery County, for four consecutive weeks beginning on November 22, 2010.

2. The Conroe Field was discovered in 1931 and has produced 734 million BO and 1,069 BCF of gas. The Conroe Field Unit ("CFU") was established in 1978 for secondary recovery and comprises 18,829 acres in the Conroe Field.

   a. The CFU was formed for purposes of pressure maintenance and secondary recovery in the Conroe Field.

   b. The unitized interval is from 4,680 feet to 5,420 feet, as shown on the log of the D. A. Madeley No. 45. The unitized interval is directly beneath the Jackson Shale and includes six separate sands within the Upper Cockfield and Conroe sands.

   c. Current production from the CFU is about 2,400 BOPD and 200,000 BWPD.

   d. Under current secondary recovery operations, remaining recoverable reserves from the CFU are estimated to be 18 million BOE.

3. Denbury purchased the Conroe Field Unit from Wapiti (the successor operator to Exxon) in December 2009, with the intention of conducting a carbon dioxide ("CO_2") flood.

4. Denbury expects to operate an immiscible CO_2 flood and recover approximately 17% of the original oil-in-place for the field, as a direct result of CO_2 flooding. This equates to at least 125 million BOE.

5. At the time of the gas cap blowdown, Exxon believed that any remaining oil to be recovered was located in isolated pockets and would be unaffected by the gas cap blowdown.

   a. Exxon projected remaining reserves of 25.5 million BOE.

   b. The amount of recovered reserves since initiation of blowdown is 29.7 million BOE, which is 4.2 million BOE greater than Exxon's 1996 estimate.

   c. The gas cap blowdown did not negatively impact any remaining oil reserves.

6. Denbury is continuing with pressure maintenance operations on the CFU with the re-injection of produced saltwater.

   a. From 1994 to 2009 the reservoir bottomhole pressure has been increasing

substantially, as a result of produced saltwater re-injection and the influx of saltwater from a strong water drive.

b. The bottomhole pressure in the CFU Well No. 1618, has risen from 400 psi in 1994 to over 700 psi in 2009.

c. Denbury is maximizing the recovery of hydrocarbons from the CFU.

7. Waste is not occurring, or likely to occur as a result of current operations on the Conroe Field Unit, Montgomery County, Texas.

8. Article 4 of the unit agreement contemplates CO2 flooding operations on the CFU by stating the operator can "engage in re-pressuring or pressure maintenance (whether with gas, inert gas or any other outside substances), water flooding, cycling or any other improved recovery operations." In Article 1, "Outside Substances" are defined and include carbon dioxide.

9. Article 18 of the CFU unit agreement provides that the CFU can only be terminated for the lack of paying quantity production for more than 90 days or by the vote of 75% or more of the working interest owners.

10. Oil & Gas Docket No. 3-68,046 (*Special Order Approving the Conroe Field Unit, Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas* and *Special Order Approving a Pressure Maintenance Operation for the Conroe Field Unit, Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas*), signed by the Commission on November 28, 1977 was essential to the efficient recovery of hydrocarbons in the Conroe Field Unit. The authority granted for secondary recovery and pressure maintenance by gas re-injection prevented the further loss of hydrocarbons in the Conroe and Conroe (Cockfield, Upper) Fields.

11. Oil & Gas Docket No. 3-68,047 (*Special Order Rescinding the Field Rules as Adopted in Special Order No. 3-4299 Issued Effective December 22, 1942, as Amended and Adopting Rules for the Conroe and Conroe (Cockfield, Upper) Fields, Montgomery County, Texas*), signed by the Commission on November 28, 1977 was essential to the efficient recovery of hydrocarbons on the Conroe Field Unit.

a. The order established a Gas Oil Ratio (GOR) of 1,000 to 1 for the field with a provision that allowed production over the GOR based on the amount of gas re-injected for pressure maintenance.

b. The new rules also allowed for the transfer of allowables from one well to another and created a bonus allowable of 2/10 of a barrel of oil for each reservoir barrel of gas injected over and above that required for net gas-oil ratio injection, limited to a maximum bonus equal to 10% of the basic allowable. This created an incentive for gas re-injection for purposes of pressure maintenance.

12. Oil & Gas Docket No. 03-0211854 (*Final Order Combining the Conroe and Conroe (Cockfield, Upper) Fields Adopting a Designation of Conroe Field for the Field Formed by Such Combination of Fields Amending and Adopting Operating Rules and regulations for the Conroe Field, Montgomery County, Texas.*), signed by the Commission on May 14, 1996, and also known as the Blowdown Order, effectively superceded and replaced many, but not all, of the provisions in Oil & Gas Docket No. 3-68,046 and Oil & Gas Docket No. 3-68,047 which were signed by the Commission in 1977.

CONCLUSIONS OF LAW

1. Proper notice of this hearing was timely served on all affected persons.

2. All things have occurred and been accomplished to give the Commission jurisdiction to decide this matter.

3. The Railroad Commission has jurisdiction to consider any allegations and take any action within its statutory authority to prevent waste, or correct violations of the oil and gas conservation laws of the State of Texas, or the rules and orders of the Commission promulgated under those laws. TNRC §§85.049, 85.051, and 85.058.

4. Continued Railroad Commission recognition of the Conroe Field Unit and the existing field rules governing that unit, will not cause the waste of hydrocarbons or harm correlative rights.

5. The evidence presented by the parties in this docket does not support a conclusion that Denbury has violated the oil and gas conservation statutes of the State of Texas, or Railroad Commission rules or orders promulgated under those laws.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Railroad Commission enter the enclosed order dismissing the complaint filed by TexCom Gulf Disposal, LLC.

Respectfully submitted,

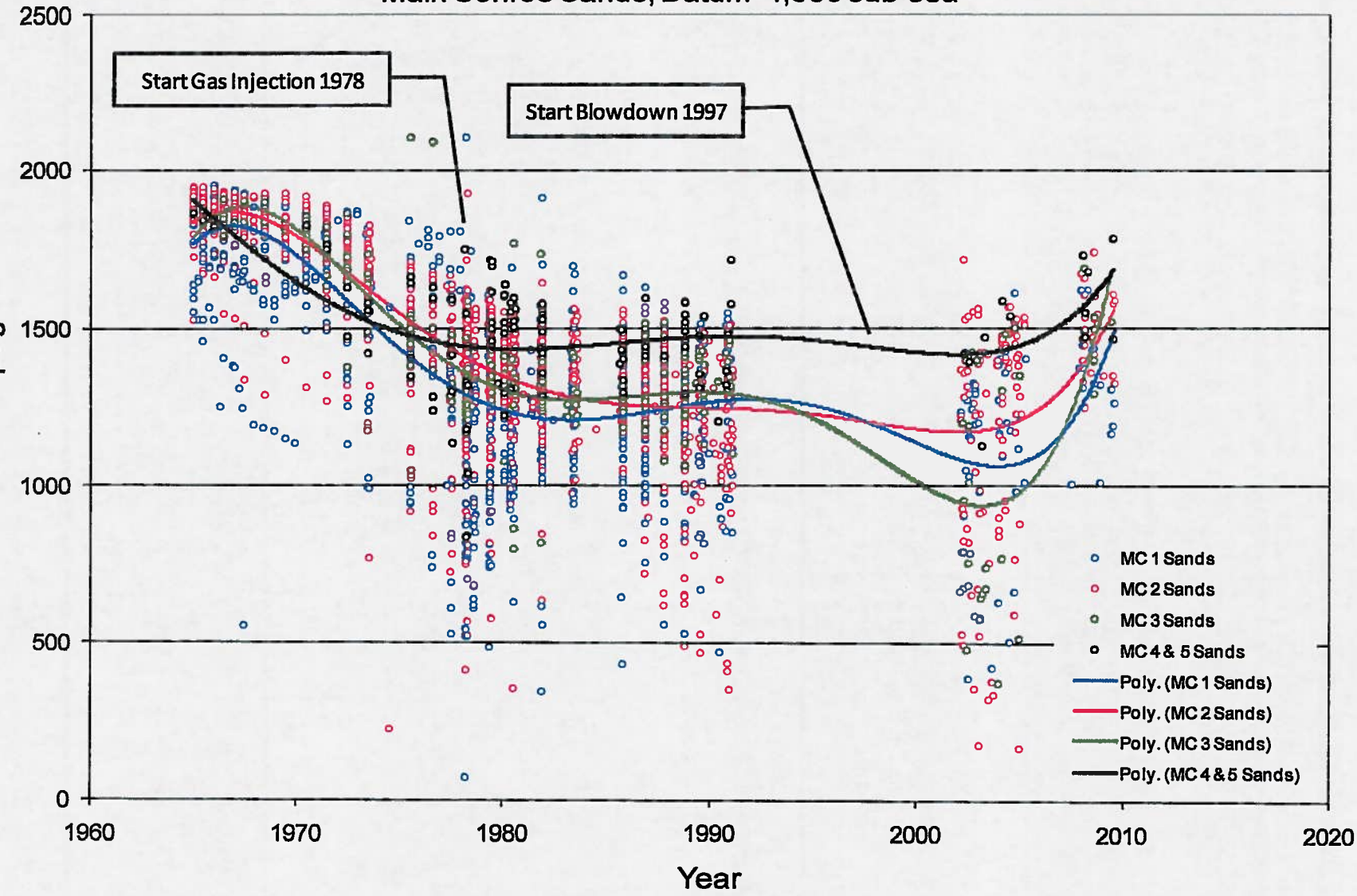
Marshall F. Enquist
Hearings Examiner

Richard D. Atkins, P.E.
Technical Examiner

ATTACHMENT I
Oil & Gas Docket No. 03-0267314

Conroe Unit Pressure History

Main Conroe Sands, Datum -4,800 sub-sea



Denbury

Oil & Gas Docket No. 03-0267314
January 21, 2011 EXHIBIT 18